

LISTING OF CLAIMS:

1 - 24 (Cancelled)

25. (Withdrawn) In a device centric services system comprising a device model agent in which at least one service runs to provide features for a device, device model agent comprising a service manager that collects transactions from the device to send to a services provider and that retrieves transactions from the services provider, an access privileges and transaction authorization scheme comprising: an Audit and Log Access level of authorization; a Simple Notification level of authorization; and an Approval Before Sending level of authorization.

26. (Withdrawn) The scheme of claim 25 wherein the Audit and Log Access level allows the service manager to complete transactions without per transaction authorization, record the transactions in a log, and present the log to a user upon demand.

27. (Withdrawn) The scheme of claim 25 wherein the Simple Notification level allows the service manager to complete transactions without per transaction authorization, record the transactions in a log, and present the log to a user upon demand, the service manager further sending a message to a user notifying the user of each transaction completion.

28. (Withdrawn) The scheme of claim 25 wherein the Approval Before Sending level allows the service manager to notify a user when a transaction is waiting to be sent, present the user with a transaction review interface, and present the user with a choice to approve or cancel the transaction, the service manager further recording the transactions in a log, and presenting the log to a user upon demand.

29. (Withdrawn) The scheme of claim 25 wherein the scheme has a default level of authorization, the scheme further allowing a user to reconfigure authorization level.

30. (Withdrawn) The scheme of claim 29 wherein the default level of authorization is Audit and Log Access.

31. (Withdrawn) The scheme of claim 25 wherein at least one user role is preconfigured.

32. (Withdrawn) The scheme of claim 31 wherein the at least one user role includes at least a Technical Key Operator, a Customer Service Engineer, and a System Administrator.

33. (Withdrawn) The scheme of claim 31 wherein a user role can be customized.

34. (Previously Presented) A system for interfacing peripheral hardware devices with a controller comprising:

- a services layer comprised of instruction sets for performing at least one of the tasks of performing break-fix repairs, self-help problem solving, performing product enhancements and performing product integration;

- a common device model agent (CDMA) comprised of:

- a device independent services environment for executing software to perform at least one of the services of automated meter reads, productivity reporting, software download, assisted user self-help, remote diagnostics, and prognostics at run time on a peripheral hardware device;

- a device model agent (DMA) software written in a platform independent language and embedded within a device which enables a user to select services to be run on peripheral hardware devices and also provides security, the DMA comprised of:

- a service manager which loads software to be executed, maintains lists of currently installed services, and manages the lifecycle of services, wherein lifecycle includes add, delete, modify, customize, synchronize, and register software services;

and,

a common provider applications programming interface (API) which communicates device configurations, device status, and supply levels between the peripheral hardware devices and Service Manager,

at least one provider application programming interface (API) to provide the software specific functions, procedures and methods; and,

at least one peripheral hardware device which performs functions in response to the execution of the software, including initiating additions of service upgrades for maintenance thereof.

35. (Previously Presented) The system defined in claim 34, wherein said CDMA further comprises a common information model application programming interface (CIMAPI) that visually represents commonly used data and application methods.

36. (Previously Presented) The system defined in claim 34, wherein said DMA further comprises a common interface model object manager (CIMOM).

37. (Previously Presented) The system defined in claim 34, wherein the instruction sets for performing tasks includes printing.

38. (Previously Presented) The system defined in claim 34, wherein the instruction sets for performing a task includes instruction sets for a remote monitoring service.

39. (Previously Presented) The system defined in claim 34, wherein the instruction sets include instruction sets for supplies replenishment.

40. (Previously Presented) A system for performing platform independent interfacing of peripheral hardware devices with a controller comprising:

a services layer comprised of instruction sets for performing at least one of the

core tasks of associated with break-fix repairs, self-help problem solving, product enhancements and product integration;

a common device model agent (CDMA) comprised of:

a device independent services environment for executing software to perform services at run time on a peripheral hardware device;

a common information model application programming interface (CIMAPI) that visually represents through use of a visual displays medium commonly used data and application methods;

a device model agent (DMA) software written in a platform independent software programming language and embedded within a memory of a peripheral device which enables a user to use the DMA to select services to be run on peripheral hardware devices and also provides security, the DMA comprised of:

a common interface model object manager (CIMOM) through which a user performs the management functions of monitoring and changing a core task to be performed by the underlying peripheral device;

and,

a service manager which loads software to be executed, maintains lists of currently installed services, and manages the lifecycle of services, wherein lifecycle includes add, delete, modify, customize, synchronize, and register software services;

and,

a common provider applications programming interface (API) which communicates device configurations, device status, and supply levels between the peripheral hardware devices and both the CIMOM and Service Manager,

at least one provider application programming interface (API) to provide the software specific functions, procedures and methods; and,

at least one peripheral hardware device which performs functions in response to the execution of the software, including initiating additions of service upgrades for maintenance thereof.

41. (Previously Presented) The system defined in claim 40, wherein the

instruction sets for performing tasks includes instruction sets for printing.

42. (Previously Presented) A method for interfacing peripheral hardware devices with a controller comprising:

- providing a services layer comprised of instruction sets for performing core tasks;

- providing a common device model agent (CDMA) comprised of:

 - a device independent services environment for executing software to perform services at run time on a peripheral hardware device;

 - a device model agent (DMA) software written in a platform independent language and embedded within a device which enables a user to select services to be run on peripheral hardware devices and also provides security, the DMA comprised of:

 - a service manager which loads software to be executed, maintains lists of currently installed services, and manages the lifecycle of services, wherein lifecycle includes add, delete, modify, customize, synchronize, and register software services and performs the steps of:

 - booting up the DMA;

 - starting the service manager;

 - loading software associated with performing the core tasks;

 - checking the availability of a dynamic services provisioning host;

 - interpreting and processing service configuration parameters;

 - loading subscribed services;

 - monitoring the subscribed services;

 - and;

 - a common provider applications programming interface (API) which communicates device configurations, device status, and supply levels between the peripheral hardware devices and Service Manager,

 - providing at least one provider application programming interface (API) to provide the software specific functions, procedures and methods; and,

 - providing at least one peripheral hardware device which performs functions in response to the execution of the software, including initiating additions of service

upgrades for maintenance thereof.

43. (Previously Presented) The method defined in claim 38, wherein the step of providing a CDMA includes providing a CDMA further comprising a common information model application programming interface (CIMAPI) that visually represents commonly used data and application methods.

44. (Previously Presented) The method defined in claim 38, wherein the step of providing a DMA includes providing a DMA further comprised of a common interface model object manager (CIMOM).

45. (Previously Presented) The method defined in claim 42, wherein the step of providing instruction sets for performing a task includes providing instruction sets for printing.